

Remarks

Claims 1-35 are pending in the application. All claims stand rejected. By this paper, claims 1, 7, 10, 26, and 30 have been amended. New claims 36 and 37 have been added. The specification has been amended to correct a typographical error. Reconsideration of all pending claims in view of the amendments and following remarks is respectfully requested.

Claim Rejections

Claims 1-6, 8-32, and 34-35 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,097,441 to Allport ("Allport '441"). The '441 reference incorporates by reference a related Allport patent, *i.e.*, U.S. Patent No. 6,104,334 ("Allport '334"), which is also relied upon by the Examiner in the rejection. Collectively, the two references will be referred to herein as "Allport."

Allport Does Not Disclose Programming a Recording Device to Automatically Record a Future Program

As amended, claim 1 recites a remote control device for scheduling television recordings without interfering with a television program being currently watched on a television, comprising

a wireless receiver for receiving television program schedule information from an interactive television system;

a display device for displaying the television program schedule information;

an input device for receiving a user selection of a television program from the displayed television program schedule information; and

a wireless transmitter for transmitting an indication of the selected television program to the interactive television system to program a recording device to automatically record the selected television program.

These claimed features allow a user to program a recording device to automatically record a future program by simply selecting the program from an electronic program guide (EPG) displayed on an integrated display of the remote control. Accordingly, the user does not need to know the channel, duration, or even the starting/ending times of the program. Moreover, the user does not need look up and manually enter codes, such as VCR Plus codes. Finally, the user does not need the remote control once the recording device has been programmed. Recording will automatically take place because the recording device is programmed to do so.

By contrast, Allport's remote control does not "program" the recording device, as claimed. Instead, it merely programs itself to send an IR command to the recording device at the time the program is to be broadcast. For example, Allport states that if "the time to record is in the future, the remote control 10 programs itself to send the appropriate IR commands at the required time." See Allport '334, col. 15, lines 39-41. Allport's IR command is not described as anything more than a standard IR command to initiate recording, such as when a user presses the "record" button on a VCR remote control.

Allport's system is clearly deficient in that his remote control must remain in the room in which the recording device is located. Moreover, because IR-based remote controls operate on a "line of sight" basis, Allport's remote control must be left essentially pointing at the recording device at all times in order to start the recording process at the appropriate time. This significantly impacts the mobility and ease-of-

use of Allport's remote control, requiring the user to be cognizant at all times of the location and orientation of the remote control. If the user forgets to leave the remote control in the proper orientation, future programs cannot be recorded.

This highlights the difference between a remote control programming itself and a remote control actually programming a recording device, as claimed. If the recording device was truly programmed in Allport, as required by claim 1, then it would not matter if the user removed the remote control from the room in which the recording device is located. It would not matter if the user left the remote control in an orientation that is not facing the recording device. There would be no need for the remote control to include a timer to send the IR command at the moment the program was to begin.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP § 2131.01. Not only must the prior art reference describe each and every element, but "the elements must be arranged as required by the claim." Id. Because Allport does not teach or suggest a remote control that "programs" a recording device (as opposed to programming itself), the applicant respectfully submits that claim 1 is patentably distinct over Allport. Claim 26 has been amended to include similar limitations and is likewise believed to be patentably distinct for at least the same reasons. Claims 2-9 and 27-35 are also believed to be patentably distinct by virtue of their dependency from claims 1 and 26.

Allport Fails to Teach or Suggest Transmitting the Channel and Start Time to the Recording Device

The Office Action rejected claims 6 and 32 as being anticipated by Allport '334, relying on the arguments made in reference to claim 1. However, as argued above, Allport does not send an IR signal to the recording device until the appointed time to begin recording. Thus, although a user may browse and select a program to be recorded, the start time remains stored in the remote control. "If the time to record coincides with the time the consumer selects the program [in the remote's clock], the appropriate IR commands are then sent to the associated device." Allport '334, col. 15, lines 34-38.

As noted above, Allport does not specify the type of data that comprises an "appropriate IR command" for a VCR record signal. Allport's disclosure focuses on sending commands from a single remote control that will communicate with a plurality of devices, such as VCR, DVD, etc. However, it is clear that a start time need not be included in Allport's IR command because the IR command is not sent until the program's start time, making the start time superfluous.

Allport does not even require that an indication of the channel of the desired recording be sent to the recording device. As far as his disclosure teaches, Allport may simply transmit a basic recording command, similar to when a user presses a record button on a VCR remote control. The recording command tells the recording device to begin recording on the currently-tuned channel, and nothing more. Thus, if the user wants to record something on a different channel, the user may be required to change the channel. Nothing in Allport suggests otherwise. Again, the difference

between Allport and the claimed invention is the difference between a remote control programming itself and the remote control programming a recording device.

Because at least one element of claims 6 and 32 are not found in a prior art reference, claims 6 and 32, as amended, are patentably distinct over Allport.

Allport Does Not Teach or Suggest the Use of VCR Plus Codes Automatically Transmitted by the Remote Control in Response to the User Selection of the Television Program

The Office Action rejected claims 7 and 33 under 35 U.S.C. § 103(a) as being unpatentable over Allport '441 in light of the Examiner's Official Notice of VCR Plus codes being a well known "way of effecting recording of programs without the user having to know and/or program the details of the recording."

However, the way in which the claimed invention uses VCR Plus codes is significantly different than the traditional method of using VCR Plus codes, of which the Examiner apparently takes Official Notice. Conventionally, a user obtains a VCR Plus code for a desired program from TV Guide® or another suitable printed publication. The user must press a VCR Plus Code button, or the like, on the remote control, and then manually enter the VCR Plus code using a numeric keypad. If the user does not have a publication containing the VCR Plus codes, the user cannot thus program the VCR. Furthermore, if the user types in the wrong 5-digit VCR Plus Code, the wrong program will be recorded.

By contrast, claim 7, as amended, recites that "the indication of the television program comprises a VCR Plus code which is automatically transmitted by the remote control device in response to the user selection of the television program."

The applicant's remote control stores the VCR plus codes and transmits them automatically in response to a user selecting a program from the EPG. Thus, a "viewer may thus rapidly program a VCR 205 with a much lower probability of [human] error." Application, page 11, lines 13-16.

Allport, at most, teaches the programming of a button or location on the remote's display for later activation at the time that recording is to begin. Allport '334, col. 8, lines 30-67; col. 15, lines 31-41. Such programming would still require prior input of the VCR Plus codes by a user, which would invite user error.

The applicant respectfully traverses the Official Notice to the extent that it applies to a remote control that automatically transmits VCR Plus codes in response to the user selecting a program from an EPG and requests that the Examiner provide a reference in support of the rejection.

Allport Does Not Teach or Suggest a Storage Device in the Remote Control to Store a Secondary Television Signal for Future Display by the Remote Control

Claim 10, as amended, recites:

a set top box configured to provide a television signal to a first display device, the set top box further configured to store television program schedule information; and

a remote control for the set top box configured to receive the television program schedule information from the set top box using a wireless method, the remote control comprising a second display device configured to display the television program schedule information, the remote control further comprising a storage device to store a secondary television signal received from the set top box for later display on the second display device.

These claimed features allow a television signal to be stored in the remote control's storage device for "later display on the second display device" included

within the remote control. New claim 37 further emphasizes that, because television signals including full-motion audio and video may be memory intensive, the storage device may be embodied as a hard drive.

Even if the Examiner is correct that Allport teaches the reception and downloading of schedule information for display on a remote control device, Allport does not teach the use of a digital storage device, such as a hard drive, so that a secondary television signal may be later viewed on the remote control.

Additionally, even if the Examiner is correct that Allport teaches use of wireless communication to provide full motion video "streamed" to the remote control, Allport does not teach that such content can be stored in the remote control for later display. Allport clearly teaches use of only a flash ROM of 2-8 MB as storage for "downloaded information such as TV schedules, CD track data, pre-loaded IR command libraries, etc." Allport '441, col. 15, lines 37-42. Such minimal memory in Allport's remote control indicates that only storage of basic program information was intended, including title-based descriptions for TV schedules accompanied by "the broadcast time, channel, and duration of each broadcast TV program." Allport '334, col. 6, lines 5-9.

New claim 36 further recites that the storage device in the remote control is to store background information for at least one television program for later display on the second display device, the background information including one of the following: pictures of actors and actresses, video previews, and audio/video interviews with people associated with the program. Allport does not disclose or suggest using the limited memory of his remote control for storing background information, such as